

CLAIM AMENDMENTS

Please amend and add new claims as follows:

1. (Currently Amended) A lubricating oil composition comprising one or more passive markers ~~which passive markers are~~ capable of detection ~~[[in situ]]~~ in situ by a detector present in a machine which is on or running.
2. (Currently Amended) ~~A~~ The lubricating oil composition ~~according to~~ of claim 1~~[[,]]~~ wherein the passive markers ~~are selected from~~ are microparticles and molecular species.
3. (Currently Amended) ~~A~~ The lubricating oil composition ~~according to~~ of claim 1 ~~or 2~~, wherein the passive markers are ~~odourant molecules~~ molecular species.
4. (Currently Amended) ~~A~~ The lubricating oil composition ~~according to~~ of claim 1 ~~or 2~~~~[[,]]~~ wherein the passive markers are ~~chosen from~~ selected from the group consisting of Radio Frequency Identification (~~RFID~~) chips, biomagnetic tags and magnetic tags.
5. (Currently Amended) A method of ~~providing~~ making a lubricating oil composition ~~according to any one of claims 1 to 4~~ comprising providing a lubricating oil and incorporating one or more passive markers into said lubricating oil which passive markers are suitable for detection in situ by a detector present in a machine which is one or running.
6. (Currently Amended) The method of claim 5 wherein the passive markers are selected from the group consisting of ~~Use of one or more of a~~ Radio Frequency Identification (~~RFID~~) chips, ~~a~~ magnetic tags, ~~a~~ biomagnetic tags and ~~an~~ odourant molecules ~~as a passive marker for a lubricating oil composition according to any one of claims 1 to 4.~~
7. (Currently Amended) A machine comprising a detector ~~for~~ capable of detecting ~~[[in situ]]~~ a passive marker in the lubricating oil composition while the machine is on or running when the lubricating oil composition contains one or more passive markers capable of detection in situ by said detector according to any one of claims 1 to 4 when the lubricating oil composition is in the machine.

8. (New) The machine of claim 7 wherein the machine further comprises an electronic control unit.
9. (New) The machine of claim 7 wherein the machine further comprises at least one sensor that indicates the state of the lubricating oil in the machine.
10. (New) The machine of claim 7 wherein the detector is selected from the group consisting of μ -readers, magnetic readers, electronic noses, and electronic tongues.
11. (New) The machine of claim 7 wherein the machine further comprises a pH sensor that is capable of providing a reading that can be correlated to the Total Acid Number of the lubricating oil.
12. (New) The lubricating oil composition of claim 3 wherein the passive markers are odorant molecules.
13. (New) The lubricating oil composition of claim 1 wherein the passive markers are of a size such that they will pass through an oil filter in the machine.
14. (New) The lubricating oil composition of claim 1 wherein the passive markers are of a size such that they will not pass through an oil filter in the machine.
15. (New) A method of operating a machine comprising (a) providing a lubricating oil into the machine comprising (i) a detector and (ii) an electronic control unit or machine management chip, (b) detecting whether or not a passive marker is present in said lubricating oil thereby providing data about the lubricating oil, and (c) passing a signal from the detector to the electronic control unit or machine management chip.
16. (New) The method of claim 15 wherein the signal is processed at the electronic control unit or machine management chip.

17. (New) The method of claim 15 wherein the data is processed to determine when an oil change is required or to set values which can be used to determine when an oil change is required.

18. (New) The method of claim 15 wherein the machine further comprises a pH sensor.

19. (New) The method of claim 18 wherein further reading the pH of the lubricating oil thereby providing data about the state of the oil.

20. (New) The method of claim 18 wherein the data are processed thereby providing information about the state of the oil to a user or a machine management system.